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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/637,381	08/11/2000	Lee Evan Nakamura	ST9-99-124	8892

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ROCKVILLE, MD 20850

EXAMINER

DODDS, HAROLD E

ART UNIT	PAPER NUMBER
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2177

DATE MAILED: 10/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/637,381

Applicant(s)

NAKAMURA ET AL.

Examiner

Harold E. Dodds, Jr.

Art Unit

2177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or  
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

2. Claims 1, 9, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Percira (U.S. Patent No. 6,122,640).

Percira anticipated independent claims 1, 9, and 17 as follows:

“...creating a persistent in-memory database table...” at col. 2, lines 53-56, col. 12, lines 9-10, and col. 9, lines 62-66.

“...and loading data into the in-memory database table...” at col. 19, lines 43-51 and col. 9, lines 62-66.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 3, 10, 11, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Percira as applied to claims above, and further in view of Sarkar (U.S. Patent No. 6,012,067).

As per claims 2, 10, and 19, the "...data is loaded..." is taught by Percira at col. 19, lines 43-51,  
but the "...from a relational data store..." is not taught by Percira.

However, Sarkar teaches the use of a relational data store as follows:

"...So far SQL queries are limited to a specific relational database with a specific data dictionary (often called the meta data repository)..." at col. 5, lines 58-62.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to use a relational data store as a source of data for a database in order to use widely used technology for sources of data to gain acceptance for the system.

5. As per claims 3, 11, and 19, the "...in-memory database table..." is taught by Percira at col. 19, lines 43-51 and col. 9, lines 62-66,  
but the "...is user-defined..." is not taught by Percera.

However, Sarkar teaches the use of user-defined activities as follows:

"...A user-defined routine (UDR) is a routine that a user creates and registers in the system catalog tables and that is invoked within a SQL statement or another routine..." at col. 3, lines 34-37.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to allow users to define tables in a database in order to provide for user input into the design of the database and gain greater acceptance in the user community.

6. Claims 4, 8, 12, 16, 20, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Percira as applied to claims above, and further in view of Shaughnessy (U.S. Patent No. 5,692,178).

As per claims 4, 12, and 20, the "...to the in-memory database table..." is taught by Percira at col. 19, lines 43-51 and col. 9, lines 62-66, but the "...enabling multiple users..." and the "...to share access..." are not taught by Percira.

However, Shaughnessy teaches the sharing of access to a database by multiple users as follows:

"...In this manner, multiple users may transparently access the same resources in the same database at the same time, with data integrity fully maintained..." at col. 2, lines 31-34.

"...In contrast to a full lock, a write lock (shared access) only prevents other users from changing the contents of a family of objects..." at col. 9, lines 55-57.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to allow multiple users to access a database at the same time in order to provide for greater utilization of the database resources.

7. As per claims 8, 16, and 24, the "...to the in-memory database table..." is taught by Percira at col. 19, lines 43-51 and col. 9, lines 62-66, but the "...limiting access..." is not taught by Percira.

However, Shaughnessy teaches the limiting access to database tables as follows:

Art Unit: 2177

"...It does not, however, limit user access to the objects in the family, for example, for viewing a database table..." at col. 9, lines 57-58.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to limit the access to database tables in order to permit the viewing or modifying of data in the database by unauthorized viewers.

8. Claims 5, 13, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Percira as applied to claims 1, 9, and 17 above respectively, and further in view of Blakeley et al. (U.S. Patent No. 5,761,493).

As per claims 5, 13, and 21, the "...dropping the in-memory database table upon receipt of a drop table command...is not taught by Percira.

However, Blakeley teaches the use of the drop table command as follows:

"...SQL commands for data definition in the database are CREATE TABLE (specifies a relation schema), ALTER TABLE (adds an attribute to a schema), and DROP TABLE (deletes a schema)..." at col. 1, lines 63-66.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to allow the dropping of a database table in order to provide a means of removing a table from the database without disrupting the other tables in the database. modifying of data in the database by unauthorized viewers.

9. Claims 6, 14, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Percira as applied to claims 1, 9, and 17 above respectively, and further in view of Blakeley and Meyerzon et al. (U.S. Patent No. 6,424,966).

As per claims 6, 14, and 22, the "...dropping the in-memory database table upon system shutdown..." is not taught by Percira.

However, Blakeley teaches the dropping of tables as follows:

"...SQL commands for data definition in the database are CREATE TABLE (specifies a relation schema), ALTER TABLE (adds an attribute to a schema), and DROP TABLE (deletes a schema)..." at col. 1, lines 63-66.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to allow the dropping of a database table in order to provide a means of removing a table from the database without disrupting the other tables in the database. modifying of data in the database by unauthorized viewers.

Blakeley does not teach the use of system shutdowns,

However, Meyerzon teaches the use of system shutdowns as follows:

"...The notification source 250 is also responsible for requesting an initialization crawl (FIG. 5b) whenever the notification source 250 first starts or experiences a discontinuity such as a system shutdown..." at col. 10, lines 28-32.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to drop tables created by users during the current session at the time of system shutdown in order to return the table structure of a database to its condition before the start of the session.

10. Claims 7, 15, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Percira as applied to claims 1, 9, and 17 above respectively, and further in view of Benedikt et al. (U.S. Patent No. 6,202,063).

As per claims 7, 15, and 23, the "...for creating the in-memory database table..." is taught by Percira at col. 2, lines 53-56 and col. 9, lines 62-66, but the "...providing a syntax..." is not taught by Percira.

However, Benedikt teaches the providing of syntax as follows:

"...Given the above-described teachings of the invention, an illustrative scenario is presented below in the context of FIGS. 4A and 4B whereby a query pre-processor of the invention performs query translation by providing an effective syntax query in response to a user-input query including certain geometric objects..." at col. 24, lines 33-38.

It would have been obvious to one ordinarily skilled in the art at the time of the invention to provide a syntax in order to provide the users with means of submitting queries to the databases.

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harold E. Dodds, Jr. whose telephone number is (703)-305-1802. The examiner can normally be reached on Monday - Friday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (703)-305-9790. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and 703-746-7238 for After Final communications.



Application/Control Number: 09/637,381  
Art Unit: 2177

Page 8

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-305-3900.

*Harold E. Dodds, Jr.*  
Harold E. Dodds, Jr.  
Patent Examiner  
October 3, 2002

*John E. Breene*  
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